

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1.-21. (Cancelled)

22. (Currently amended) A surgical implant comprising a porous polyethylene matrix ~~wherein all sides of the implant have porous surfaces~~ and a surgical grade metal mesh embedded within the matrix such that the porous polyethylene matrix fills spaces within the mesh and encases the mesh such that all sides of the porous polyethylene matrix forming surfaces of the implant have, ~~wherein the porous polyethylene matrix comprises pores that are sized between 20-500 microns, and wherein the implant is able to be bent or displaced by manipulation by hand such that the implant will generally maintain the shape to which it has been bent or displaced.~~

23. (Currently amended) A surgical implant having a ~~top~~ first surface and a ~~bottom~~ second surface, the implant comprising a porous polyethylene matrix and a surgical grade metal mesh embedded within the matrix such that the porous polyethylene matrix fills spaces within the mesh and encases the mesh such that the second surface and sides of the porous polyethylene matrix have, ~~wherein the top surface comprises a solid barrier surface of polyethylene and the bottom surface comprises the porous polyethylene matrix with pores that are sized between 20-500 microns,~~ wherein the first surface comprises a non-porous

barrier surface of polyethylene, and wherein the implant is able to be bent or displaced by manipulation by hand such that the implant will generally maintain the shape to which it has been bent or displaced.

24. (Currently amended) The implant recited in claim + 22, wherein the ~~thermoplastic resin is a porous resin~~ polyethylene matrix is porous throughout the implant.

25. (Currently amended) The implant of claim ~~22~~ 23, wherein the polyethylene matrix is porous throughout the matrix ~~implant~~, and wherein the non-porous barrier surface of polyethylene is on the porous polyethylene matrix.

26. (New) The implant of claim 22, further comprising a structure for attachment to bone extending from the porous polyethylene matrix.

27. (New) The implant of claim 26, wherein the structure for attachment to bone comprises a portion of mesh that extends beyond the encased mesh and the porous polyethylene matrix and is adapted to receive a surgical screw or surgical bone anchor.

28. (New) The implant of claim 23, further comprising a structure for attachment to bone extending from the porous polyethylene matrix.

29. (New) The implant of claim 28, wherein the structure for attachment to bone comprises a portion of mesh that extends beyond the encased mesh and the porous polyethylene matrix and is adapted to receive a surgical screw or surgical bone anchor.

30. (New) The implant of claim 22, wherein the surgical grade metal mesh comprises titanium.

31. (New) The implant of claim 23, wherein the surgical grade metal mesh comprises titanium.

32. (New) The implant of claim 22, wherein the porous polyethylene matrix comprises a high density polyethylene.

33. (New) The implant of claim 23, wherein the porous polyethylene matrix comprises a high density polyethylene.